

## ABSTRACT

Various means of identifying individual joints of drill pipe or other drill tools have been suggested but have found only narrow utility. Such means include low frequency radio frequency identification systems that are inherently limited by short read ranges and require the reader antenna be placed directly over and very close to an embedded identification tag. With the development of mid-frequency and high frequency systems for radio frequency identification, read distances become much longer and a Gigahertz identification tag has recently been specifically developed for automatic drill string component identification. This invention provides a means for configuring, assembling and providing in-hole protection to a Gigahertz or other radio frequency identification tags.